

## WHAT IS CLAIMED IS

1. A measurement method for analysis and measurement of a sample in a fluorescence measuring apparatus or phosphorescence measuring apparatus,

5 wherein a sample is held by a sample holder through surface tension and only said sample is placed in the path of excited light;

said measurement method further characterized in that measurement is made without detecting light of  
10 fluorescence, phosphorescence coming from sample holder material or scattered light, wherein an intermediary of any sample holder material is not used.

2. A sample holder and measurement method using said sample holder for analysis and measurement of a  
15 sample in a fluorescence measuring apparatus or phosphorescence measuring apparatus,

wherein a sample is held by a sample holder through surface tension and only said sample is placed in the path of excited light;

20 said measurement method further characterized in that measurement is made without measuring light of fluorescence, phosphorescence coming from sample holder material or scattered light, wherein an intermediary of any sample holder material is not used.

25 3. A sample holder and measurement method using

said sample holder for analysis and measurement of a sample in a fluorescence measuring apparatus or phosphorescence measuring apparatus, characterized in that

5        a hole with an inverted pyramidal form including as an inverted conical, inverted triangular or inverted quadrangular shape is formed on a carbon material, glassic carbon, tungsten carbon or pyro-coated carbon, or a material with very small  
10       fluorescence or phosphorescence caused by scattered light, and

         there is no leakage of sample despite the presence of a hole with an area of 0.0001 to 5 square millimeter without material on the bottom;

15       wherein said sample is held in said sample holder by surface tension.

         4. A sample holder and measurement method using said sample holder for analysis and measurement of a sample in a fluorescence measuring apparatus or  
20       phosphorescence measuring apparatus, characterized in that

         a cylindrical, triangular prismatic or quadrangular prismatic hole is formed on a carbon material, glassic carbon, tungsten carbon or pyro-coated carbon, or a material with very small  
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fluorescence or phosphorescence caused by scattered light, and

there is no leakage of sample despite the presence of a hole with an area of 0.0001 to 5 square

5 millimeter without material on the bottom;

wherein said sample is held in said sample holder by surface tension.

5. A sample holder and measurement method using said sample holder for analysis and measurement of a  
10 sample in a fluorescence measuring apparatus or phosphorescence measuring apparatus, characterized in that

a carbon material, glassic carbon, tungsten carbon or pyro-coated carbon, or a material with very small  
15 fluorescence or phosphorescence caused by scattered light is shaped in prismatic forms on said sample holder which are held at intervals of 0.2mm to 3mm in the lateral or vertical direction,

wherein there is no leakage of sample despite the  
20 presence of a gap without material and said sample is held between prismatic forms by surface tension.

6. A method of measuring phosphorescence or  
25 fluorescence on a transmission surface, wherein said method uses a sample holder built up to hold sample liquid by surface tension with columns made of carbon,

glassic carbon, tungsten carbon or pyro-coated carbon,  
or materials which generate very little fluorescence  
5 or phosphorescence by excited light beams.

7. A sample holder and measurement method using  
said sample holder for analysis and measurement of a  
sample in a fluorescence measuring apparatus or  
10 phosphorescence measuring apparatus, characterized in  
that,

when light is measured according to the method of  
measuring fluorescence on a transparent surface or  
method of measuring phosphorescence on a transparent  
15 surface,

only a sample is placed in the path to reduce or  
eliminate the possibility of detecting and measuring  
non-specific fluorescence or phosphorescence which  
would be derived from other than the sample.